

CLAIMS

What is claimed is:

- 1 1. A method for dynamically monitoring resources, the method
2 comprising the operations of:
 - 3 (a) sending to a monitor request module a request of a user to
4 monitor at least one specified resource; and
 - 5 (b) creating at least one monitor to monitor the specified resource,
6 using the monitor request module.
- 1 2. The method of claim 1 wherein the specified resource includes at
2 least one of a file object, a registry object, and a set of all processes that are
3 active while the monitor is active.
- 1 3. The method of claim 1 further comprising:
 - 2 (c) providing to the user a link to the monitor.
- 1 4. The method of claim 1 wherein, in operation (a), there are more
2 than one specified resources, the specified resources being of the same type,
3 the method further comprising:
 - 4 (d) creating a set of first objects corresponding to the specified
5 resources, the first objects representing states of the specified
6 resources and being maintained by the monitor.
- 1 5. The method of claim 4 further comprising:
 - 2 (e) updating the set of first objects upon receiving a notification of a
3 change to at least one of the specified resources, using the monitor; and
 - 4 (f) logging information related to the change.
- 5 6. The method of claim 5 further comprising:

6 (g) creating a new object representing a current state of the specified
7 resource having the change; and

8 (h) comparing the new object to the corresponding first object
9 representing a previous state of the specified resource to determine the
10 change.

11 7. The method of claim 1 wherein, in operation (a), there are more
12 than one specified resources, the specified resources being of different types,
13 and, in operation (b), there are more than one monitors created corresponding
14 to the different types of specified resources, the method further comprising:

15 (d) creating different sets of first objects corresponding to the
16 different types of specified resources, each of the different sets of first objects
17 representing states of a corresponding type of specified resources and being
18 maintained by a corresponding monitor.

1 8. The method of claim 7 further comprising:

2 (e) providing to the user a link to each of the monitors.

1 9. The method of claim 1 wherein the monitor is implemented as
2 one of a COM object, a thread, and a process.

1 10. The method of claim 1 wherein the monitor request module is
2 initiated by a resource monitor service.

1 11. The method of claim 10 wherein, after being initiated, the monitor
2 request module restarts all restartable monitors.

1 12. The method of claim 1 further comprising:

2 determining, using the monitor request module, whether the specified
3 resource is already being monitored by an active monitor previously created;
4 and

5 if the specified resource is already being monitored by an active monitor
6 previously created, setting the currently created monitor to error status using
7 the monitor request module.

1 13. An article of manufacture comprising:
2 a machine-accessible medium including data that, when accessed by a
3 machine, causes the machine to perform operations comprising:
4 (a) sending to a request module a request of a user to monitor at
5 least one specified resource; and
6 (b) creating at least one monitor to monitor the specified resource,
7 using the request module.

1 14. The article of manufacture of claim 13 wherein the specified
2 resource includes at least one of a file object, a registry object, and a set of all
3 processes that are active while the monitor is active.

1 15. The article of manufacture of claim 13 wherein the operations
2 further comprise:
3 (c) providing to the user a link to the monitor.

1 16. The article of manufacture of claim 13 wherein, in operation (a),
2 there are more than one specified resources, the specified resources being of
3 the same type, and wherein the operations further comprise:
4 (d) creating a set of first objects corresponding to the specified
5 resources, the first objects representing states of the specified
6 resources and being maintained by the monitor.

1 17. The article of manufacture of claim 16 wherein the operations
2 further comprise:
3 (e) updating the set of first objects upon receiving a notification of a
4 change to at least one of the specified resources, using the monitor; and
5 (f) logging information related to the change.

6 18. The article of manufacture of claim 17 wherein the operations
7 further comprising:

8 (g) creating a new object representing a current state of the specified
9 resource having the change; and

10 (h) comparing the new object to the corresponding first object
11 representing a previous state of the specified resource to determine the
12 change.

13 19. The article of manufacture of claim 13 wherein, in operation (a),
14 there are more than one specified resources, the specified resources being of
15 different types, and, in operation (b), there are more than one monitors created
16 corresponding to the different types of specified resources, and wherein the
17 operations further comprise:

18 (d) creating different sets of first objects corresponding to the
19 different types of specified resources, each of the different sets of first objects
20 representing states of a corresponding type of specified resources and being
21 maintained by a corresponding monitor.

1 20. The article of manufacture of claim 19 wherein the operations
2 further comprise:

3 (e) providing to the user a link to each of the monitors.

1 21. The article of manufacture of claim 13 wherein the monitor is
2 implemented as one of a COM object, a thread, and a process.

1 22. The article of manufacture of claim 13 wherein the operations
2 further comprise:

3 initiating the monitor request module using a resource monitor service.

1 23. The article of manufacture of claim 22 wherein the operations
2 further comprise:

3 restarting all restartable monitors using the monitor request module.

1 24. The article of manufacture of claim 13 wherein the operations
2 further comprise:

3 determining, using the monitor request module, whether the specified
4 resource is already being monitored by an active monitor previously created;
5 and

6 if the specified resource is already being monitored by an active monitor
7 previously created, setting the currently created monitor to error status using
8 the monitor request module.

1 25. A system comprising:
2 a processor; and
3 a memory coupled to the processor, the memory containing program
4 code that, when executed by the processor, causes the processor to perform
5 operations comprising:
6 (a) sending to a monitor request module a request of a user to
7 monitor at least one specified resource; and
8 (b) creating at least one monitor to monitor the specified resource,
9 using the monitor request module.

1 26. The system of claim 25 wherein the specified resource includes at
2 least one of a file object, a registry object, and a set of all processes that are
3 active while the monitor is active.

1 27. The system of claim 25 wherein the operations further comprise:
2 (c) providing to the user a link to the monitor.

1 28. The system of claim 25 wherein, in operation (a), there are more
2 than one specified resources, the specified resources being of the same type,
3 and wherein the operations further comprise:
4 (d) creating a set of first objects corresponding to the specified
5 resources, the first objects representing states of the specified
6 resources and being maintained by the monitor.

1 29. The system of claim 28 wherein the operations further comprise:
2 (e) updating the set of first objects upon receiving a notification of a
3 change to at least one of the specified resources, using the monitor; and
4 (f) logging information related to the change.

5 30. The system of claim 29 wherein the operations further
6 comprising:

7 (g) creating a new object representing a current state of the specified
8 resource having the change; and
9 (h) comparing the new object to the corresponding first object
10 representing a previous state of the specified resource to determine the
11 change.

12 31. The system of claim 25 wherein, in operation (a), there are more
13 than one specified resources, the specified resources being of different types,
14 and, in operation (b), there are more than one monitors created corresponding
15 to the different types of specified resources, and wherein the operations further
16 comprise:

17 (d) creating different sets of first objects corresponding to the
18 different types of specified resources, each of the different sets of first objects
19 representing states of a corresponding type of specified resources and being
20 maintained by a corresponding monitor.

1 32. The system of claim 31 wherein the operations further comprise:
2 (e) providing to the user a link to each of the monitors.

1 33. The system of claim 25 wherein the monitor is implemented as
2 one of a COM object, a thread, and a process.

1 34. The system of claim 25 wherein the operations further comprise:
2 initiating the monitor request module using a resource monitor service.

1 35. The system of claim 34 wherein the operations further comprise:
2 restarting all restartable monitors using the monitor request module.

1 36. The system of claim 25 wherein the operations further comprise:
2 determining, using the monitor request module, whether the specified
3 resource is already being monitored by an active monitor previously created;
4 and

- 5 if the specified resource is already being monitored by an active monitor
- 6 previously created, setting the currently created monitor to error status using
- 7 the monitor request module.